

workmen uncovered a quantity of oil, and the flames broke out, forming a smoke column some 300 feet high that hung over the ruins all that day. The yard men kept streams on the ruins till the 12th.

It must be observed that these tanks were, most of them, 90 feet in diameter, 35 feet high, and contained about 30,000 barrels each of crude, refined oil, gasoline, solid wax, and tar, respectively, in all 16 were destroyed, with other property.

There seems to be more than one lesson to be taught by these large conflagrations. From the study of the meteorological disturbances in the atmosphere while such large quantities of heated air and gases are ascending for several days without cessation, we learn:

1. The surface winds are drawn toward the center of such a fire for a distance of over one-half mile, as was shown by all vanes pointing away from it within that distance.

2. That there is a limit to which smoke will ascend even when carried up by heated air and gases, as shown by the way it spread out into the umbrella-like form.

3. That Professor Fergusson's observation⁴ that cumulus clouds are formed was proven in that except for those over the smoke column the sky was mostly cloudless, while at times the smoke was crested with them.

4. What influence did the fire exert on the atmosphere? Was it responsible for the two local thundershowers that took place on Friday and Saturday at about the same hour—7:30 and 6:30 p. m.

The following data is furnished by Mr. Willard W. Hotchkiss, Volunteer Observer at the Bergen Point Station, N. J. Weather Service:

Date.	Barometer.		Thermometer.		Hygrometer.		Rainfall.		Wind direction and velocity.	
	A. M.	P. M.	A. M.	P. M.	A. M.	P. M.	A. M.	P. M.	P. M.	
July 4.....	Inches	Inches	°	°	%	%	1.20	nw.	18	
5.....	29.98	29.98	71*	71*	95*	95*	.09	sw.	8	
6.....	30.10	30.00	74	74	76	76	.09	sse.		
7.....	29.95	29.90	75	74	90	88	.54	sw.	Light.	
	29.90	29.90	79	73	82	82	.06		Light.	

* On July 4, midnight. All other records are taken at 7:30 a. m. and 7:30 p. m.

RECENT PAPERS BEARING ON METEOROLOGY.

W. F. R. PHILLIPS, in charge of Library, etc.

The subjoined list of titles has been selected from the contents of the periodicals and serials recently received in the library of the Weather Bureau. The titles selected are of papers or other communications bearing on meteorology or cognate branches of science. This is not a complete index of the meteorological contents of all the journals from which it has been compiled; it shows only the articles that appear to the compiler likely to be of particular interest in connection with the work of the Weather Bureau:

Nature, London. Vol. 62.

Darrison, Charles. The Distance to which the Firing of Heavy Guns is Heard. P. 377.

Nature, London. Vol. 62.

Hughes, T. McK. Snowdrifts on Ingleboro in July. P. 389.

— Nile Floods and Monsoon Rains. P. 391.

Nature, London. Vol. 62.

Halm, J. Latitude Variation; Earth Magnetism and Solar Activity. P. 460.

Symons's Meteorological Magazine, London. Vol. 35.

Wilson, Albert. The Cloud-burst of Rombald's Moor. P. 97.

Annalen der Physik Leipzig. Vierde Folge.

Ebert, H. and Hoffmann, B. A. Elektricitätserregung in flüssiger Luft. P. 706.

⁴Clouds above fires have been recorded many times in the early annals of meteorology, e. g., in America by Mitchell and Espy; in Europe, by Kamitz.

Annuaire de la Société Météorologique de France. 47me année.

Raulin, V. Observations d'évaporation dans l'Empire russe. P. 181.

Coeurdevache. Evaporation suivant la température, l'état hygrométrique et la vitesse du vent. P. 188.

Popular Science Monthly, New York. Vol. 57.

Lucas, Frederick A. Birds as Flying Machines. P. 473.

Groff, George G. Conquest of the Tropics. P. 540.

Deutsche Mechaniker-Zeitung. Beiblatt zur Zeitschrift für Instrumentenkunde. Berlin.

Fischer, Karl T. Ein neues Barometer. [From *Physikal. Zeitschr.*] P. 127.

La Géographie, Paris. 1900.

— La météorologie en Roumanie. P. 131.

Himmel und Erde, Berlin. 12 Jürg.

Rubner, Professor. Kampf um die Gesundheit im XIX Jahrhundert. (Fortsetzung) Wärmeverhältnisse. P. 504.

Journal of the Western Society of Engineers, Chicago. Vol. 5.

Seddon, James A. Reservoirs and the control of the lower Mississippi. P. 259.

Philosophical Magazine, London. Vol. 50.

Stevenson, J. Chemical and Geological History of the Atmosphere. P. 312.

Memorias y Revista de la Sociedad Científica "Antonio Alzate", Mexico. Tomo 14.

Moreno y Anda. L'Insolation dans nos Climats. P. 265.

Descoix, L. Sur la discussion mathématique des séries d'observations météorologiques. P. 295.

Gaen, Leipzig. 34 Jahrg.

Reinicke. Vergleichung der Falb'schen Prognosen mit dem in Deutschland tatsächlich eingetreten Wetter im meteorologischen Jahre 1898-1899. P. 606.

— Der erste Aufstieg des Zappelinschen Luftschiffes. P. 615.

Das Wetter, Berlin. 17 Jahrg.

Assman, R. Aus dem Aeronautischen Observatorium des königl. meteorologischen Instituts. (Schluss.) P. 169.

Scientific American, New York. Vol. 83.

Michaud, G. The Climate of our New Possessions [Cuba, Porto Rico, and the Philippines]. P. 171.

La Nature, Paris. 28me Année.

Derome, J. Les Progrès de la Télégraphie sans Fils. P. 242.

Nederlandsch Tijdschrift voor Meteorologie. 1 Jaargang.

Buijsman, M. Het klimaat en de plantengroei van Canada. P. 33.

Nell, Chr. A. C. Twee Merkwaardige Halo's. P. 39.

Kassner, C. Uitkomst van Waarneminger over Golf-Wolken. P. 41. [From *Met. Zeit.* 1900.]

Nell, Chr. A. C. Hoe Ver Kan Men den Donder Hooren? P. 45.

Monne, A. J. Een Wolkhoos. P. 46.

Red, N. T. v. M. Waargenomen Kapvorming Bij Cumulus. P. 47.

— Hagel te Congo. P. 47.

MEXICAN CLIMATOLOGICAL DATA.

Through the kind cooperation of Señor Manuel E. Pastrana, Director of the Central Meteorologic-Magnetic Observatory, the monthly summaries of Mexican data are now communicated in manuscript, in advance of their publication in the Boletín Mensual. An abstract, translated into English measures, is here given, in continuation of the similar tables published in the MONTHLY WEATHER REVIEW since 1896. The barometric means have not been reduced to standard gravity, but this correction will be given at some future date when the pressures are published on our Chart IV.

Mexican data for August, 1900.

Stations.	Altitude.	Mean barometer.	Temperature.			Relative humidity.	Precipitation.	Prevailing direction.	
			Max.	Min.	Mean.			Wind.	Cloud.
Arteaga (Coahuila)	Feet.	Inch.	° F.	° F.	° F.	#	Inch.		
Durango (Seminario)	6,243	24.09	92.3	64.4	75.9	62	1.60	e, sw.	e.
El Labrador (Coahia)			84.2	61.7	70.5				
Gran Cepeda (Coahia)			95.9	60.8	73.9				
Leon (Guanajuato)	5,934	24.35	83.5	55.8	67.3	74	7.15	s.	e.
Mazatlan	25	29.89	91.4	72.7	85.1	73	2.01	nw.	ne.
Mexico (Obs. Cent.)	7,472	23.10	78.1	57.2	63.0	68	3.66	n.	ne.
Morelia (Seminario)	6,401	24.03	76.8	55.2	64.4	76	3.32	sw.	e.
Parras (Coahuila)	8,986	21.8	67.1	25.7					
Puebla (Col. Cat.)	7,112	22.27	80.2	49.1	67.3	78	6.66	ene.	ne.
Saltillo (Col. S. Juan)	5,399	24.82	87.1	58.6	70.2	73	7.30	n.	se.
Zapotlan (Sem.)	5,078	25.14	82.8	59.0	69.1	75	9.22	n.	e.